

FIG. 1A

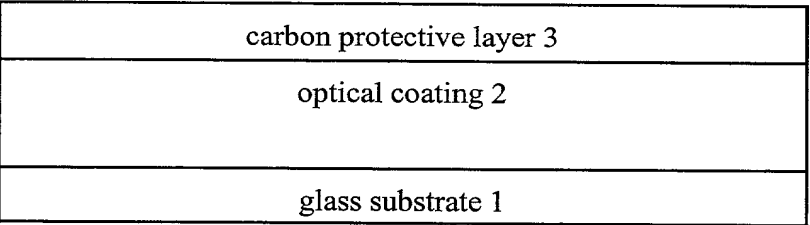


FIG. 1B

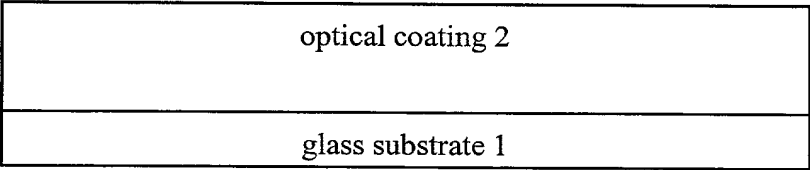


FIG. 1C

carbon protective coating 3
scratch propagation blocker layer 4
Si <sub>3</sub> N <sub>4</sub> layer 2a
optical coating 2
glass substrate 1

FIG. 2

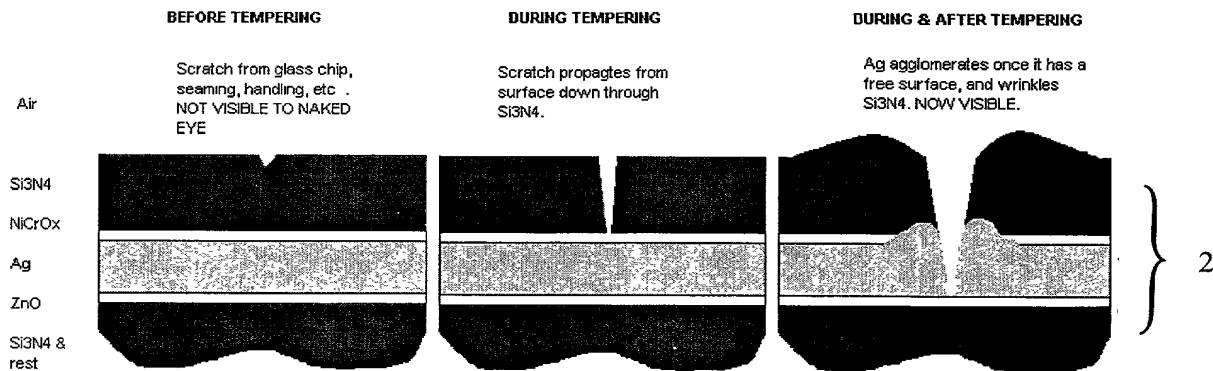


FIG. 3

optical coating 2
glass substrate 1

FIG. 4A

metal layer 5
optical coating 2
glass substrate 1

FIG. 4B

scratch propagation blocker layer 4
optical coating 2
glass substrate 1

FIG. 4C

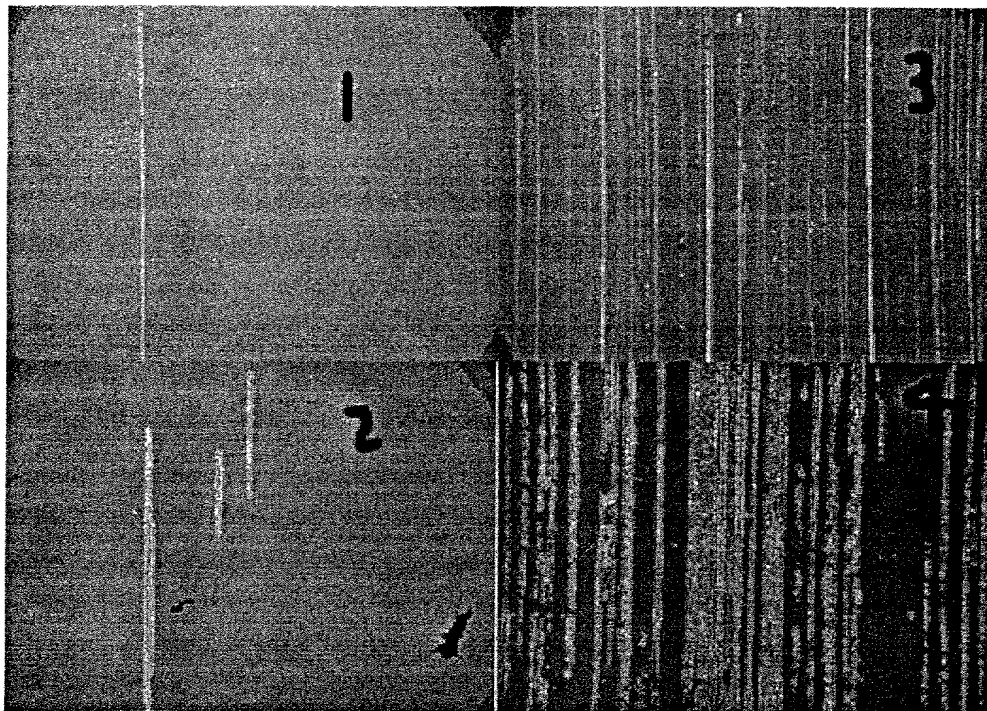


FIG. 5

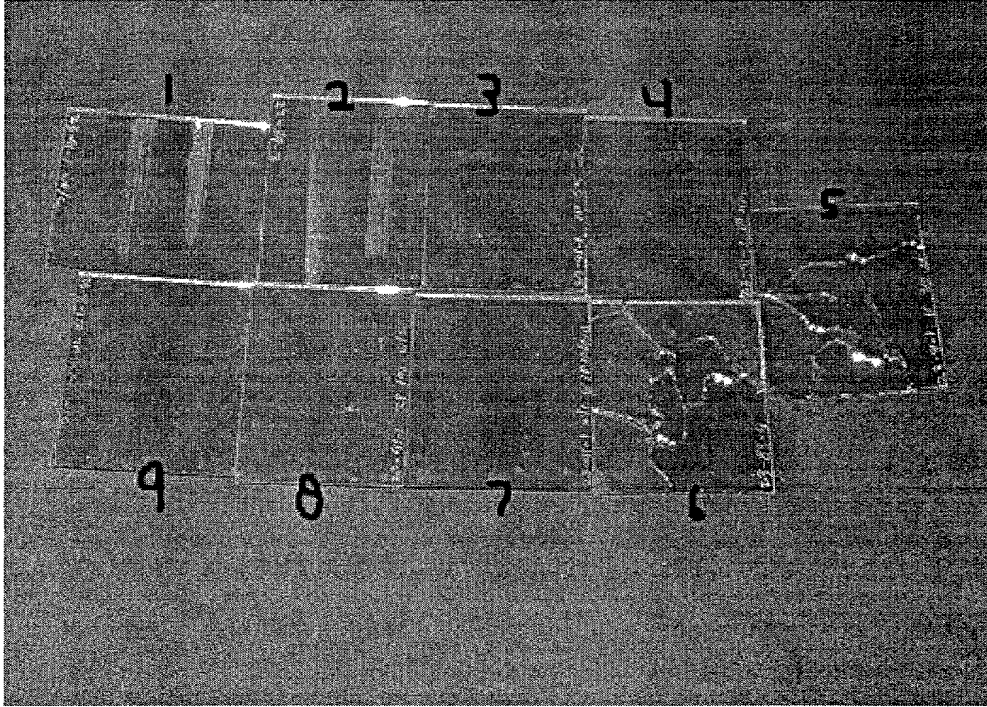


FIG. 6